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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/829,197 | 04/09/2001 | Thomas R. Giallorenzi | 907.0013USU | 6842 |

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| EXAMINER |
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CHOU, ALBERT T

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| ART UNIT | PAPER NUMBER |
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2662

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,197

Applicant(s)

GIALLORENZI ET AL.

Examiner

Albert T. Chou

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The following is a response to the amendment filed on April 18, 2005:
 - Claims 1 – 27 are rejected under a new ground of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 - 27 are rejected under U.S.C. 102(e) as being anticipated by Morvan et al. (US Patent No. 6,894,992) hereinafter referred to as Morvan.

Regarding claims 1 and 14, Morvan teaches a communication system comprising a Base Station BS 1804 [**Fig. 18C; one base station**] and Mobile Stations MS 1805, 1806 & 1810 [**Fig. 18C; subscriber stations**]. Morvan teaches at least one of the mobile stations which is to communicate, referenced 1805 and 1806, is capable of functioning in base station mode [**Fig. 18C; col. 30, lines 51-53**] and, in the contrary case, a mobile station 1810 capable of functioning as a base station takes this role vis-à-vis the two mobile stations 1805 and 1806 which are to communicate and constitutes with them a new cell, in order to release the initial base station 1804 from the traffic

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concerning communication between the mobile stations 1805 and 1806 **[Fig. 18C; col. 30, lines 58-64]**. Given that MS 1805, 1806 and 1810, which are identical devices in essence, are capable of functioning in MS mode and BS mode, they are inherent to be operating with a common waveform and having the common signal processing circuitry **[Arranging a forward link and a reverse link to operate a common waveform and using common forward link and reverse signal processing circuitry in the BS and individual ones of MSs]**. Although Morvan does not expressly teach the forward link operating at a first frequency that is transmitted by the BS and received by the MS, and the reverse link operating at a second frequency that is transmitted by the MS and received by the BS, it is well known in the art of wireless communications that a separate frequency is used in the forward link and reverse link and is therefore inherent in Morvan's application.

Regarding claims 2 and 15, Morvan teaches a mobile station 1810 capable of functioning as a base station takes this role vis-à-vis the two mobile stations 1805 and 1806 which are to communicate and constitutes with them a new cell, in order to release the initial base station 1804 from the traffic concerning communication between the mobile stations 1805 and 1806 **[Fig. 18C; col. 30, lines 58-64; a step of providing switching circuitry for enabling one of said SSs to function as a BS by transmitting on the first frequency and receiving on the second frequency]**.

Regarding claims 3 and 16, Morvan teaches MS 1805, 1806 and 1810, which are identical devices in essence, are capable of functioning in MS mode and BS mode **[Fig. 18B & 18C; col. 30, lines 51-53, 58-64]** and, therefore, they are inherent to be

operating with a common waveform which enables essential parameters of the forward link and the reverse link to be the same.

Regarding claims 4-13 and 17-26, Morvan teaches MS 1805, 1806 and 1810, which are identical devices in essence, are capable of functioning in MS mode and BS mode **[Fig. 18B & 18C; col. 30, lines 51-53, 58-64]**. In order to perform both MS and BS functions in one of MS, it is inherent that MS 1805, 1806 and 1810 use the common waveform which enables essential parameters, including a modulation format, chip rate, bit rate, frame rate, superframe rate, frame structure, error-control coding scheme, synchronization words and control field structure, of the forward link and the reverse link to be the same.

Regarding claim 27, Morvan teaches a communication system comprising a Base Station BS 1804 **[Fig. 18A; one base station]** and Mobile Stations MS 1805 and 1806 **[Fig. 18A; subscriber stations]**. Morvan teaches **[Figs. 18B & 18C]** at least one of the mobile stations which is to communicate, referenced 1805 and 1806, is capable of functioning in base station mode **[Fig. 18B; col. 30, lines 51-53; switching circuitry enabling one of SSs to function as a point-to-point pseudo-BS for transmitting signals to and receiving signals from another SS]** and, in the contrary case, a mobile station 1810 capable of functioning as a base station takes this role vis-à-vis the two mobile stations 1805 and 1806 which are to communicate and constitutes with them a new cell, in order to release the initial base station 1804 from the traffic concerning communication between the mobile stations 1805 and 1806 **[Fig. 18C; col. 30, lines 58-64; switching circuitry enabling one of SSs to function as a point-to-multipoint**

pseudo-BS for transmitting signals to and receiving signals from a plurality of other SSs]. Given that MS 1805, 1806 and 1810, which are identical devices in essence, are capable of functioning in MS mode and BS mode, they are inherent to be operating with a common waveform and having the common signal processing circuitry **[Comprising circuitry for causing a forward link and a reverse link to operate a common waveform and using common]**. Although Morvan does not expressly teach the forward link operating at a first frequency that is transmitted by the BS and received by the MS, and the reverse link operating at a second frequency that is transmitted by the MS and received by the BS, it is well known in the art of wireless communications that a separate frequency is used in the forward link and reverse link and is therefore inherent in Morvan's application.

Response to Arguments

4. Applicant's arguments, filed April 18, 2005, with respect to the rejections of claims 1-27 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Morvan et al. (US Patent No. 6,894,992).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert T. Chou whose telephone number is 571-272-6045. The examiner can normally be reached on 8:30 - 17:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizoou

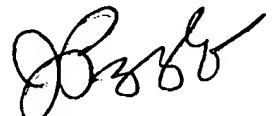
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can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ac

Albert Chou
June 10, 2005



JOHN PEZZLO
PRIMARY EXAMINER